United Nations ST/SG/AC.10/C.3/2014/12

Secretariat

Distr.: General
24 March 2014

Original: English

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

Forty-fifth session
Geneva, 23 June – 2 July 2014
Item 5 (e) of the provisional agenda
Electric storage systems: miscellaneous

Transport of lithium batteries of small productions runs or prototype lithium batteries in equipment

Transmitted by the expert from Germany[1]

Introduction

1. Special provision 310 excludes batteries from production runs consisting of not more than 100 cells or batteries and prototypes when these are transported for testing from the application of the testing requirements in sub-section 38.3 of the Manual of Tests and Criteria.

2. This special provision is assigned to UN 3090 and UN 3480 but not to UN 3091 and UN 3481. As a consequence, equipment containing such batteries cannot be transported legally.

3. In practice, this causes difficulties, for instance in the manufacturing of highly specialized devices that are produced in small quantities only and into which batteries are installed that have been specially developed for such devices. In Germany, for example, there was a request regarding the transport of a submarine for military purposes (no vehicle, as not suitable for the transport of people or goods). Only a few of these submarines are produced. The question of transport, however, also arises in the case of other types of devices of small production runs or of custom-builds with specifically designed lithium

[1] In accordance with the programme of work of the Sub-Committee for 2013-2014 approved by the Committee at its sixth session (refer to ST/SG/AC.10/C.3/84, para. 86 and ST/SG/AC.10/40, para. 14).

batteries such as individually manufactured robots. It is not always possible to remove the batteries for transport, and removing them does not automatically improve safety.

4. Prototypes, too, might need to be transported in equipment for test purposes, e.g. in the case that the battery is to be tested installed in a component or the complete device is to be tested as a prototype with the battery installed.

5. It should also be made possible to transport lithium batteries in devices in accordance with special provision 310. Here, it should also be considered that very large devices do not fit into a suitable packaging; in these cases, the transport can be effected under the conditions laid down by the competent authority.

6. This opportunity should also be used to clarify that batteries which have been damaged within the framework of testing have to be transported under the conditions for damaged batteries.

Proposal

7 For UN 3091 and UN 3481: Assign "301" in column 6 of the dangerous goods list.

8 Amend special provision 310 as follows:

301 The testing requirements in Chapter 38.3 of the Manual of Tests and Criteria do not apply to production runs consisting of not more than 100 cells and batteries, or to pre-production prototypes of cells and batteries when these prototypes are transported for testing, if the following conditions are met:

(a) Cells and batteries:

(ia) The cells and batteries are transported in an outer packaging that is a metal, plastics or plywood drum or a metal, plastics or wooden box and that meets the criteria for packing group I packagings; and

(bii) Each cell and battery is individually packed in an inner packaging inside an outer packaging and is surrounded by cushioning material that is non-combustible, and non-conductive.

(b) Cells and batteries contained in equipment:

(i) The cells and batteries contained in equipment are transported in an outer packaging that is a metal, plastics or plywood drum or a metal, plastics or wooden box and that meets the criteria for packing group I packagings; and

(ii) The cells and batteries are protected against short circuit.

Large equipment may be transported unpackaged under conditions specified by the competent authority.

(c) Identified damaged or defective cells and batteries shall be transported in accordance with special provision 376 and packaged in accordance with P908 of 4.1.4.1 or LP904 of 4.1.4.3, as applicable.